

*Drulia ctenosclera*, a new species of neotropical spongillid (Porífera, Spongillidae)\*

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ABSTRACT

A new species of freshwater sponge (Spongillidae) is described in genus *Drulia* GRAY, 1867, sensu PENNEY & RACEK, 1968. Particular characteristics of *Drulia ctenosclera* n.sp. are the shape of its microscleres, gemmoscleres and the minuteness of its spicular components and gemmules. The new species shares some characteristics in common with *Drulia cristata* (WELTNER, 1895) and *Drulia conifera* BONETTO & EZCURRA DE DRAGO, 1973.

RESUMO

Uma nova espécie de esponja é descrita dentro do gênero *Drulia* GRAY, 1867, sensu PENNEY & RACEK, 1968. São características peculiares a *Drulia ctenosclera* n.sp. a forma de suas microscleras e gemoscleras e o tamanho diminuto de seus componentes espiculares e de suas gêmulas. A nova espécie tem algumas características em comum com *Drulia cristata* (WELTNER, 1895) e com *Drulia conifera* BONETTO & EZCURRA DE DRAGO, 1973.

*Drulia ctenosclera* n. sp.

Fig. 1-6

Material: BRAZIL. Amazonas, Negro river (contributor to the left margin of the Amazon) MCN 82, 178 and 179, X. 1965, E.J. Fittkau leg. (MCN = Museu de Ciências Naturais da Fundação Zoobotânica do Rio Grande do Sul).

Holotype — MCN 178 (Holotype deposited in Museu Nacional, Rio de Janeiro, RJ, Brazil)

Paratypes: MCN 82 and 179. (Paratypes deposited in MCN, Porto Alegre, RS, Brazil).

Type locality: Negro River, Amazonas, Brazil.

**DESCRIPTION:** Sponge incrusting, forming minute alignments of mamillary elevations connected to each other by lateral expansions in a rosary like manner, each mammilla topped by a conspicuous oscular apperture surrounded by a ringlike poral area. Skeleton evenly

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reticulated, devoid of radial fibers. Surface smooth. Colour of dry material brownish black. Pinacoderm conspicuous in the poral area. Consistency of dry sponge brittle.

**M e g a s c l e r e s:** short, stout, smooth, slightly curved anfistrongyla, of one single series. Length range 136-251 micrometers width range 20-37 micrometers.

**M i c r o s c l e r e s:** minute anfiroxa with abruptly pointed extremities and covered almost up to their extremities with large, conical, straight spines with lanceolated tips. Length range 64-47 micrometers. Width range 2-4 micrometers.

**G e m o s c l e r e s:** minute, scutelliform, circular scleres; rotule entire, undulated, with slightly recurved margins and shaft reduced to a conical, large, gradually pointed spine bearing a microgranulation on its tip. Diameter of rotule 14-17 micrometers.

**G e m m u l e s:** minute, spherical, devoid of gemmular cage, pneu. layer thin and granular, one single layer of gemmoscleres embedded in this layer strictly tangentially, their rotules rarely overlapping each other. Porus tube straight and quite long, also encrusted with gemmoscleres. Gemmules found only in the larger mammilla, from two to four. Diameter 234-259 micrometers.

## DISCUSSION

The new species is markedly distinct from the other species of the genus in its microcleres having a complete covering with large and erect spines (resembling thus in profile a comb with teeth on both sides), its gemmoscleres bearing a disproportionally large spine as well as the general minuteness of its spicular components and gemmules.

*D. ctenosclera* n.sp. does not show radial fibers and has only one series of megascleres, the same as *D. conifera* BONETTO & EZCURRA DE DRAGO, 1973. On the other side it shares with *D. conifera* and *D. cristata* (WELTNER, 1895), strongiliform megascleres, absence of a gemmular cage, reduced number of gemmules and gemmular coating with one single layer of gemmoscleres.

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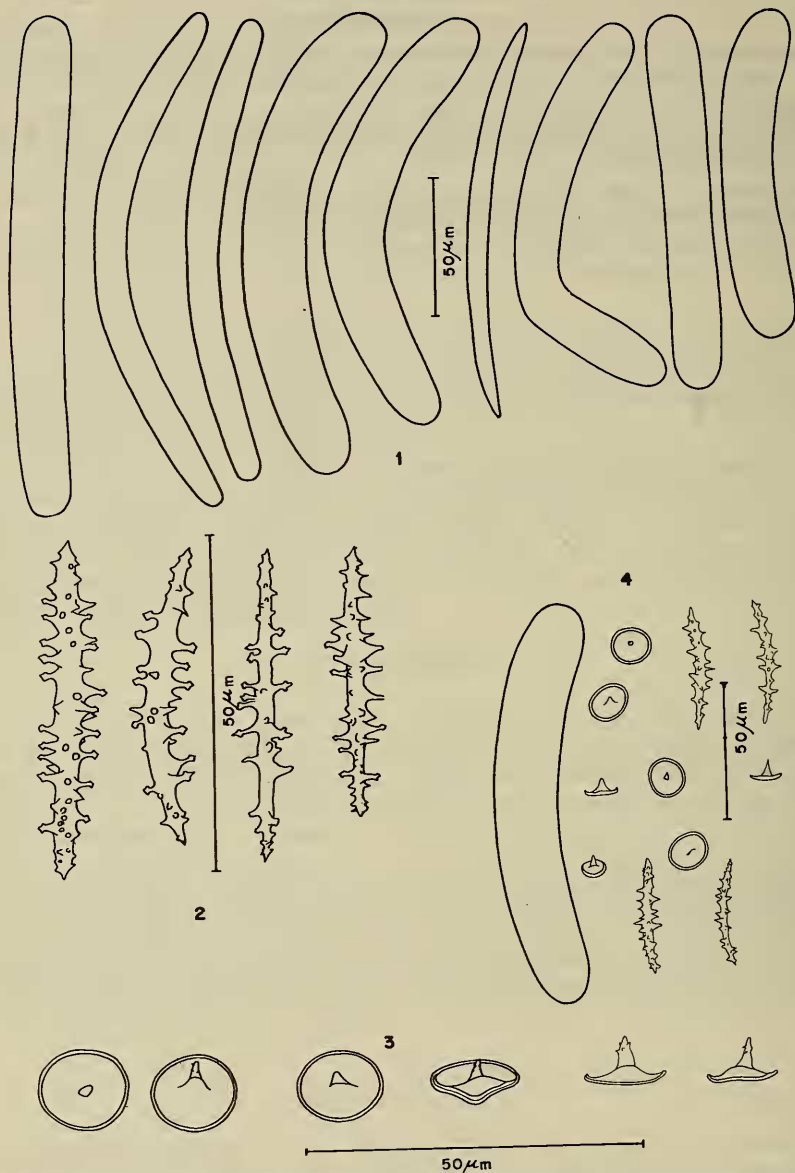
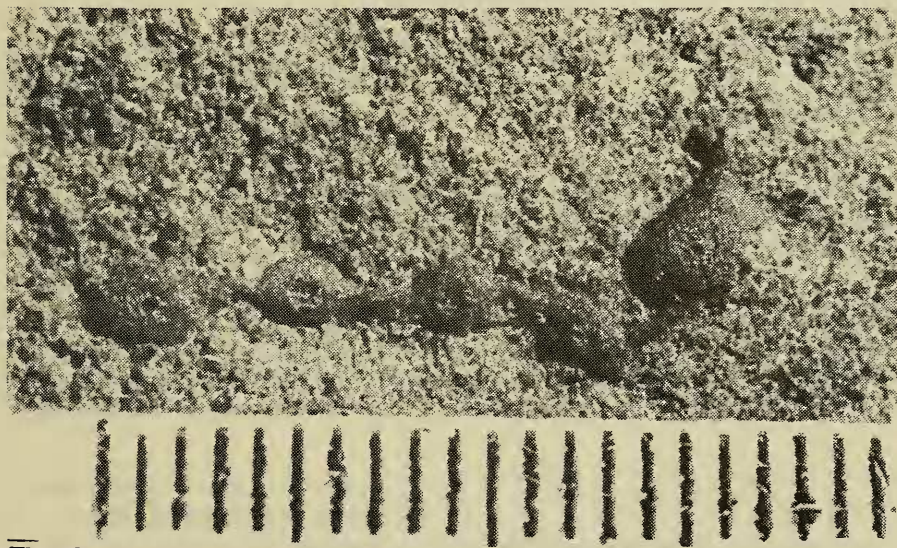


Fig. 1-4: Spicular components of *Drulia ctenosclera* n.sp; 1. megasccleres at lower magnification (x400, young megasccleres are anfioxea); 2. microfcleres at high magnification (x 1.000); 3. gemmoscleres at high magnification (x 1.000); 4. whole spicular set at low magnification (x 400).



**Fig. 5**



**Fig. 6**

**Fig. 5-6:** Holotype of *Drulia ctenosclera*: 5. general view; 6. closer view.